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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/870,803
Filing Date: May 31, 2001
Appellant(s): OTTESEN ET AL.

Gero G. McClellan (Reg. No. 44,227)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 9-11-2006 appealing from the Office action mailed 2-24-2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is incorrect. A correct statement of the status of the claims is as follows:

Claims 1-28 are pending in the application. Claims 1-28 were previously presented in the application. Claims 1-28 stand finally rejected as discussed below. The final rejections of claims 1-28 are appealed. The pending claims are shown in the attached Claims Appendix.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5,883,823	Ding	3-1999
5,671,020	Law	9-1997
5,617,333	Oyamada et al.	4-1997

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12, 14, 16, 17, and 25 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The "tangible signal bearing medium" of claim 12 and its dependents, is referred to in the specification at page 7 which indicates that the "medium" can be interpreted as "information conveyed to a computer by a communications medium". Such an embodiment can include "information downloaded from the Internet and other networks". Thus it is clear that the "medium" claims are intended to be claims of mere information.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1, 2, 4-9, 12, 14-17, 19, 21, 22, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ding, Patent #5,883,823 and Law, Patent #5,671,020.

9. With regard to claim 1, which teaches a method for processing multimedia data, Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. With regard to claim 1, which further teaches indexing the multimedia data to an i by j matrix; and storing a plurality of odd/event index sequences of the i by j matrix in a data storage device, Ding teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory. Furthermore, as admitted by the applicant "Ding discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients" and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-

column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Further more the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6). Ding teach storing odd/even index sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67), however, doesn't specifically teach that two odd/even index sequences are stored uniquely in separate sections of memory. Law teaches a system that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as opposed to the duplication in all memory regions of Ding. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different locations, as did Law. One would have been motivated to make such a combination because this provides the more efficient access to the image data.

10. With regard to claim 2, which teaches the multimedia data selected form still image data and video image data, Ding further teaches, in column 1, lines 17-23, the use of still images, and the use of video data.

11. With regard to claim 4, which teaches multimedia data representing an image having i times j pixels, Ding teaches, in column 8, lines 24-35, the multimedia data being represented by y time x pixels.

12. With regard to claims 5 and 14, which teach an image having i times j sub-images and wherein the i by j matrix corresponds to the i times j sub-images, Ding teaches, in column 8, lines 24-35, the multimedia data being represented by y time x blocks.

13. With regard to claims 6 and 15, which teach compressing the sub-images before storing the i by j matrix on a hard drive, and decompressing the reconstructed i by j matrix to render the image, Ding further teaches, in column 7, lines 10-25, in column 8, lines 24-35, and in column 9, lines 40-63, the process of compressing the image before storing and decompressing the image to display on a monitor. Ding teaches, in column 4, line 12 through column 5, line 15, the storing utilizing odd/even indexing being part of the IDCT algorithm, where, column 9, lines 40-62 and column 7, lines 11-25, discusses the process of reversing the prior process of the conversion, specifically providing the output to a inverse DCT converter for reversing the operation performed by the DCT converter. Ding further teaches, in column 5, lines 59-64, utilizing the computation of the inverse discrete cosine transform during video encoding or video compression and/or video decoding or video decompression, where the IDCT algorithm as shown above comprises indexing the matrix into odd/even sequences.

14. With regard to claims 7, 16, and 21, which teach the odd/even index sequences comprising: and odd/odd, odd/even, even/odd, and even/even index sequencing, Ding

further teaches, in column 4, lines 60-66 and figure 7, odd/even index sequencing in which there are four index groups even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column.

15. With regard to claim 8, which teaches index sequences being stored in logic blocks on a hard disk drive and wherein each of the index sequences is separately stored in respective logic blocks, Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 1 index sequence.

16. With regard to claims 9, 17, and 22, which teach each index sequence stored in one or more logic blocks on a hard disk drive and wherein each logic block contains portions of at most two different index sequences, Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 2 index sequence.

17. With regard to claim 12, which teaches a signal bearing medium, comprising a program which, when executed by a processor, performs a method comprising: indexing the multimedia data to an i by j matrix; and storing a plurality of odd/even index

sequences of the i by j matrix on a hard disk drive, Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. Ding further teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory. Furthermore, as admitted by the applicant "Ding discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients" and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Further more the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6). Ding teach storing odd/even index sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67), however, doesn't specifically teach that two odd/even index sequences are stored uniquely in separate sections of memory. Law teaches a system that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as

opposed to the duplication in all memory regions of Ding. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different locations, as did Law. One would have been motivated to make such a combination because this provides the more efficient access to the image data.

18. With regard to claim 19, which teaches a server system for processing multimedia data, Ding teaches, a processor (see column 6, lines 35-38), a memory (see column 6, lines 35-38), one or more storage devices for storing multimedia data (see column 6, lines 9-38). With regard to claim 19, further teaching indexing the multimedia data to an i by j matrix; and storing a plurality of odd/even index sequencing of the i by j matrix, Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. Ding further teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory. Furthermore, as admitted by the applicant "Ding discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients" and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form

an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Further more the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6). Ding teach storing odd/even index sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67), however, doesn't specifically teach that two odd/even index sequences are stored uniquely in separate sections of memory. Law teaches a system that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as opposed to the duplication in all memory regions of Ding. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different locations, as did Law. One would have been motivated to make such a combination because this provides the more efficient access to the image data.

19. With regard to claims 24, 25, and 26, which teach retrieving data comprising the stored index sequences form the data storage device and reconstructing the I by j matrix utilizing odd/even index sequencing of the retrieved data, Ding teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the

DCT coefficients and resultant spatial data in memory. Ding further teaches, in column 7, lines 10-25, in column 8, lines 24-35, and in column 9, lines 40-63, the process of compressing the image before storing and decompressing the image from storage to display on a monitor.

20. With regard to claim 27, Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. Ding teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory. Ding further teaches, in column 7, lines 10-25, in column 8, lines 24-35, and in column 9, lines 40-63, the process of compressing the image before storing and decompressing the image from storage to display on a monitor. Furthermore, as admitted by the applicant "Ding discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients" and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Further more the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background

(paragraphs 3 and 6). Ding teach storing odd/even index sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67), however, doesn't specifically teach that two odd/even index sequences are stored uniquely in separate sections of memory. Law teaches a system that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as opposed to the duplication in all memory regions of Ding. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different locations, as did Law. One would have been motivated to make such a combination because this provides the more efficient access to the image data.

22. Claims 3, 10, 11, 13, 18, 20, 23, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oyamada et al., Patent #5,617,333, hereinafter Oyamada, Law, and Ding, Patent #5,883,823.

23. With regard to claims 3, 13, and 20, Ding teaches a system that provides for compressing image and video data for storage in memory, which includes a hard drive (see column 35-38), but doesn't disclose disabling a data recovery procedure programmed on the data storage device, Oyamada teaches a system placing image and video date into blocks (see column 3, lines 8-50), similar to that of Ding but further teaches, in column 3, lines 20-51, disabling the default data recovery procedure of

retransmitting the data, and to use a system of estimating the block with it's associated blocks. Oyamada teaches, in column 2, lines 46 through column 3, lines 15, replacing the convention method of retransmission in the case of errors, with the new method of interpolating a fixed value replacement for the errored portion of the image (see column 1, lines 7-20 and column 3, lines 19-51). It would have been obvious to one of ordinary skill in the art, having the teachings of Ding, Law, and Oyamada before him at the time the invention was made to modify the image processing system of Ding and Law to use the system of estimating blocks as did Oyamada. One would have been motivated to make such a combination because with systems where large amounts of multimedia are transferred a means of date correction is needed.

24. With regard to claim 10, Ding teaches a system that provides for compressing image and video data, but doesn't disclose when logic is flawed, assigning one or more fixed values for one or more portions of the index sequences contained in the flawed logic. Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 1 index sequence. Oyamada teaches a system placing image and video date into blocks (see column 3, lines 8-50), similar to that of Ding but further teaches, in column 10, lines 14-45, replacing flawed data with a selected substitution block stored in memory. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding, Law,

and Oyamada before him at the time the invention was made to modify the image processing system of Ding and Law to use the system of estimating blocks as did Oyamada. One would have been motivated to make such a combination because with systems where large amounts of multimedia are transferred a means of date correction is needed.

25. With regard to claims 11, 18, and 23, Ding teaches a system that provides for compressing image and video data, but doesn't disclose when logic is flawed, interpolating one or more replacement values for one or more portions of the index sequences contained in the flawed logic. Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 1 index sequence. Oyamada teaches a system placing image and video date into blocks (see column 3, lines 8-50), similar to that of Ding, but further teaches, in column 1, lines 15-19, when data has been lost interpolating with a substitution data. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding, Law, and Oyamada before him at the time the invention was made to modify the image processing system of Ding and Law to use the system of estimating blocks as did Oyamada. One would have been motivated to make such a combination because with systems where large amounts of multimedia are transferred a means of date correction is needed.

26. With regard to claim 28, Ding teaches a system that provides for compressing image and video data, but doesn't disclose disabling a data recovery procedure, or when logic is flawed, assigning one or more fixed values for one or more portions of the index sequences contained in the flawed logic. Ding further teaches, in column 8, lines 24-35, the index sequences being stored in memory, where memory is known to be made up of logical blocks of data, these logical block being of definable size, as shown by the applicant (page 10), showing that these logical blocks can be set up to only store so many sequences, in the present case the logic blocks would store less than enough information to contain more than 1 index sequence. Oyamada teaches a system placing image and video date into blocks (see column 3, lines 8-50), similar to that of Ding but further teaches, in column 2, lines 46 through column 3, lines 15, replacing the convention method of retransmission in the case of errors, with the new method of interpolating a fixed value replacement for the errored portion of the image (see column 1, lines 7-20, column 3, lines 19-51, and in column 10, lines 14-45). It would have been obvious to one of ordinary skill in the art, having the teachings of Ding, Law, and Oyamada before him at the time the invention was made to modify the image processing system of Ding and Law to use the system of estimating blocks as did Oyamada. One would have been motivated to make such a combination because with systems where large amounts of multimedia are transferred a means of date correction is needed.

(10) Response to Argument

1. Rejection of claims 3, 13, 20, and 28 under 35 U.S.C. 112, first paragraph:

- Support for the claims was properly pointed out and explained by the applicant with regard to claims 3, 13, 20, and 28. The 35 U.S.C. 112 rejection has been removed, making the provided arguments moot.

2. Rejection of claims 12, 14, 16, 17, and 25 under 35 U.S.C. 101:

- The "tangible signal bearing medium" of claim 12 and its dependents, is referred to in the specification at page 7 which indicates that the "medium" can be interpreted as "information conveyed to a computer by a communications medium". Such an embodiment can include "information downloaded from the Internet and other networks". Thus it is clear that the "medium" claims are intended to be claims of mere information. The "signal bearing medium" was not said to be tangible in the specification, so it can't be interpreted that way in the claims.

3. Rejection of claims 1, 2, 4-9, 12, 14-17, 19, 21, 22, and 24-27 under 35 U.S.C. 103(a) as being unpatentable over Ding and Law:

With respect to the arguments directed at the Claims **1, 2, 4-9, 12, 14-17, 19, 21, 22, and 24-27** the Appellant's arguments are focused on the limitations regarding the use of a hard drive in storing the index sequences, in the cited references. More specifically, as stated from representative Claim 1, the limitation argued is:

"storing a plurality of odd/even index sequences of the i by j matrix on a hard disk drive having a plurality of logic blocks, wherein at least two odd/even index sequences are stored in separate logic blocks of the hard disk drive."

Since the interpretation of the limitation is the basis for the arguments, the Examiner's interpretation is now given. The claim, as interpreted by the examiner, pertains to a storing of partitions of a multimedia data into different areas using a hard drive. As stated in the eighth paragraph of MPEP 2101[R2].II.C.,

"*Office personnel are to give claims their broadest reasonable interpretation in light of the supporting disclosure.* In re Morris, 127 F.3d 1048, 1054-55, 44 USPQ2d 1023,1027-28 (Fed. Cir. 1997)."

Based on the interpretation of the claim limitations being argued, the Examiner will now explain how the teachings of the Ding and Law references are within the scope of these limitations.

Ding teaches, in column 1, lines 17-23 a system for compressing multimedia data. Ding teaches, in column 4, line 40 through column 5, line 15 and in figure 7, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences, deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory.

Furthermore, as admitted by the applicant "Ding discloses a partial odd/even indexing of a coefficient matrix in computing regional inverse discrete cosine transform (IDCT) coefficients" and Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where memory includes a hard drive, see column 6, lines 36-40). Furthermore the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6). Ding further teach storing odd/even index sequences in a RAID (which duplicates data on numerous devices to avoid errors, see column 6, lines 52-67).

Ding is supplemented by Law who teaches a system that divides pixel data into even and odd sequences (see column 2, line 64 through column 3, line 20), as did Ding, but further teaches storing even and odd sequences of pixel data in different memory regions, as opposed to the duplication in all memory regions of Ding. It would have been obvious to one of ordinary skill in the art, having the teachings of Ding and Law before him at the time the invention was made to modify the odd/even indexing system of Ding to include the storage at different location, as did Law.

The examiner will now address the individual arguments and statements made by Appellant.

From page 13 of the Appeal Brief, from the fifth paragraph, the Appellant argues that "Ding fails to disclose, at a minimum, storing a plurality of odd/even index sequences of the I by j matrix on a hard disk drive."

The examiner respectfully contends that Ding further teaches, in column 4, line 40 through column 5, line 15, indexing a matrix (i by j array) into groups of even-row-even-column, even-row-odd-column, odd-row-even-column, and odd-row-odd-column index sequences (as is claimed), deriving from each a component class of odd/even index sequences that form an output matrix, and further storing the DCT coefficients and resultant spatial data in memory (where the memory of the system includes a hard drive, see column 6, lines 36-40). Furthermore the division of image data into a matrix and storage on a hard drive is admitted to in the applicant background (paragraphs 3 and 6).

From page 14 of the Appeal Brief, from the first paragraph, the Appellant argues that "Ding discloses only a video encoding or decoding system having a memory for storing DCT coefficients and resulting data. However, Ding clearly distinguishes such "memory" from hard disk drives because the video encoder 76 and the video decoder 74 include its own memory which is completely separate from other components such as the hard drive 90."

The examiner respectfully contends that it is not argued by the Examiner that the video encoder 76 and the video decoder 74 include memory, but this memory could

clearly be the hard disk drive 90 which is pointed to in column 6, lines 36-51 and in figure 2, connected to the bus 86 adjacent from the video encoder 76 and the video decoder 74. **Memory** is defined in the art as ***a device where information can be stored and retrieved*** (see Microsoft Computer Dictionary, Fifth Edition, page 333). A hard drive is clearly a device where information can be stored and retrieved.

From page 14 of the Appeal Brief, from the second paragraph, the Appellant argues that "Furthermore, the references cited by the Examiner, either alone or in combination, do not teach, show or suggest storing a plurality of odd/even index sequences of the i by j matrix on a hard disk drive having a plurality of logic blocks, wherein at least two odd/even index sequences are stored in separate logic blocks of the hard disk drive." "Therefore, Law does not teach, show or suggest storing at least two odd/even index sequences in separate logic blocks of the hard disk drive because Law discloses that each memory module includes a portion of each index, and thus, failure of one memory module would affect both indexes since each memory module contains a portion of each index."

The examiner respectfully contends that the terminology "logic blocks" is extremely broad only really limits to different sections of the memory. Law clearly teaches, in column 3, lines 13-20, "a plurality of consecutive pixels values are separated KK into odd and even pixels. Even pixels are stored in an even region beginning in a first column indicated by an initial index in one of the dual memory modules, and odd pixels

are stored in a region starting in the other memory module beginning with an offset (K) from the initial index." This shows a clear odd/even indexing of the pixel data, and distinctly shows storing odd indexes in one portion of memory and even indexes in another portion of memory.

4. Rejection of claims 3, 10, 11, 13, 18, 20, 23, and 28 under 35 U.S.C. 103(a) as being unpatentable over Ding, Law, and Oyamada et al.

From page 16 of the Appeal Brief, from the third paragraph, the Appellant argues that "Oymada teaches 'in column 2, lines 46 through column 3, line 15, replacing the convention method of retransmission in the case of errors, with the new method of interpolating a fixed value replacement for the errored portion of the image." However, such teachings are not directed to disabling a data recovery procedure programmed on a hard disk drive."

The examiner respectfully contends that Oymada teaches a reconstruction procedure where corrupted image data can be estimated for purposes of reconstruction. Oymada is relied upon for the teaching of replacing a method of error correction (retransmission) of image data with a new different system (see column 2, lines 46 through column 3, line 51). It is believe that such a replacement of recovery procedure would be obviously transferable from accessing of image data from a remote storage

location, of Oymada to the accessing of image data from a hard drive storage device of Ding and Law, as both system attempt to access stored image data.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer..

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Dennis Bonshock
Patent Examiner
11/21/06

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